08/501,872

* *

```
=> s active alumina catalyst
        323449 ACTIVE
         80648 ALUMINA
        157309 CATALYST
L1          22 ACTIVE ALUMINA CATALYST
                 (ACTIVE(W)ALUMINA(W)CATALYST)
=> s l1 and sodium
        272719 SODIUM
L2          13 L1 AND SODIUM
=> d 1-
```

1. 5,453,557, Sep. 26, 1995, Processes for converting chlorinated byproducts and waste products to useful materials; A. Dale Harley, et al., 585/641; 570/216, 230; 585/642 [IMAGE AVAILABLE]

2. 5,430,215, Jul. 4, 1995, Selective hydrodechlorination of 1,2,3-trichloropropane to produce propylene; Mark D. Cisneros, 585/642, 638, 641, 654, 657, 660 [IMAGE AVAILABLE]

3. 5,250,737, Oct. 5, 1993, Process for hydrocarbyl trisulfide product; Nubar Ozbalik, 568/21, 26 [IMAGE AVAILABLE]

4. 5,242,613, Sep. 7, 1993, Process for mixed extreme pressure additives; Nubar Ozbalik, et al., 252/46.7, 46.6 [IMAGE AVAILABLE]

5. 5,167,844, Dec. 1, 1992, Lubricant formulations; Rolf Schumacher, et al., 252/32.7R, 32.5, 46.6 [IMAGE AVAILABLE]

6. 4,982,011, Jan. 1, 1991, Production of ether/ether-alcohol compositions; Jean A. A. Hanin, 568/678; 252/364; 568/591, 594, 671 [IMAGE AVAILABLE]

7. 4,735,743, Apr. 5, 1988, Ether-containing mixtures in flexible PVC; Jean A. A. Hanin, et al., 252/364; 106/311 [IMAGE AVAILABLE]

8. 4,683,343, Jul. 28, 1987, Ether-containing mixtures in flexible PVC; Jean A. Hanin, et al., 568/594, 671 [IMAGE AVAILABLE]

9. 4,658,068, Apr. 14, 1987, Hydroformylation of olefins; Jean A. A. Hanin, 568/451, 492, 883 [IMAGE AVAILABLE]

10. 4,656,215, Apr. 7, 1987, Ether containing mixtures in flexible PVC; Jean A. A. Hanin, et al., 524/376, 378, 569 [IMAGE AVAILABLE]

11. 4,122,156, Oct. 24, 1978, Process for the production of carbon disulfide from sulfur dioxide removed from a flue gas; James R. Kittrell,

et al., 423/443, 416, 570 [IMAGE AVAILABLE]

12. 4,080,390, Mar. 21, 1978, Process for the production of o-phenylphenol; Juichi Imamura, 568/747; 502/243, 327 [IMAGE AVAILABLE]

13. 3,879,310, Apr. 22, 1975, Surface stabilized active alumina; Ronald J. Rigge, et al., 502/208; 423/625, 626, 628; 585/667, 671, 906 [IMAGE AVAILABLE]

```
=> s l2 and silica
        140587 SILICA
L3          12 L2 AND SILICA
=> s l3 and clay
         46991 CLAY
L4           0 L3 AND CLAY
=> s l3 and silicate
         48042 SILICATE
L5           0 L3 AND SILICATE
=> s l3 and barium sulfate
         48780 BARIUM
        132506 SULFATE
         10617 BARIUM SULFATE
                 (BARIUM(W)SULFATE)
L6           0 L3 AND BARIUM SULFATE
=> s l3 and calcium sulfate
        144811 CALCIUM
        132506 SULFATE
         11398 CALCIUM SULFATE
                 (CALCIUM(W)SULFATE)
L7           0 L3 AND CALCIUM SULFATE
=> s l3 and ammonium sulfate
        144874 AMMONIUM
        132506 SULFATE
         14397 AMMONIUM SULFATE
                 (AMMONIUM(W)SULFATE)
L8           0 L3 AND AMMONIUM SULFATE
=> s l3 and ceramic fiber#

         94357 CERAMIC
        184386 FIBER#
          4419 CERAMIC FIBER#
                 (CERAMIC(W)FIBER#)
L9           0 L3 AND CERAMIC FIBER#
=> s l3 and asbestos fiber#

         20360 ASBESTOS
        184386 FIBER#
          3364 ASBESTOS FIBER#
```

```
                (ASBESTOS(W)FIBER#)
L10          0 L3 AND ASBESTOS FIBER#
=> s l3 and barium
         48780 BARIUM
L11          0 L3 AND BARIUM
=> s l3 and calcium
        144811 CALCIUM
L12          6 L3 AND CALCIUM
=> d 1-

1.  5,453,557, Sep. 26, 1995, Processes for converting chlorinated
byproducts and waste products to useful materials; A. Dale Harley, et
al., 585/641; 570/216, 230; 585/642 [IMAGE AVAILABLE]

2.  5,250,737, Oct. 5, 1993, Process for hydrocarbyl trisulfide product;
Nubar Ozbalik, 568/21, 26 [IMAGE AVAILABLE]

3.  5,242,613, Sep. 7, 1993, Process for mixed extreme pressure
additives; Nubar Ozbalik, et al., 252/46.7, 46.6 [IMAGE AVAILABLE]

4.  4,735,743, Apr. 5, 1988, Ether-containing mixtures in flexible PVC;
Jean A. A. Hanin, et al., 252/364; 106/311 [IMAGE AVAILABLE]

5.  4,683,343, Jul. 28, 1987, Ether-containing mixtures in flexible PVC;
Jean A. Hanin, et al., 568/594, 671 [IMAGE AVAILABLE]

6.  4,656,215, Apr. 7, 1987, Ether containing mixtures in flexible PVC;
Jean A. A. Hanin, et al., 524/376, 378, 569 [IMAGE AVAILABLE]
=> s l12 and cellulose
        106262 CELLULOSE
L13          0 L12 AND CELLULOSE
=>
```

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
=> s catalyst
L1       157309 CATALYSTs l1 and active alumina
=>
         323449 ACTIVE
          80648 ALUMINA
            814 ACTIVE ALUMINA
                  (ACTIVE(W)ALUMINA)
L2            635 L1 AND ACTIVE ALUMINA
=> s l2 and sodium
         272719 SODIUM

L3            325 L2 AND SODIUM
=> s l3 and 2700 ppm
           6623 2700/BI
           2103 2,700/BI
           8555 2700
                  ((2700 OR 2,700)/BI)
          81631 PPM
             81 2700 PPM
                  (2700(W)PPM)
L4             0 L3 AND 2700 PPM
=> s l3 and silica
         140587 SILICA
L5           240 L3 AND SILICA
=> s l5 and zirconium
          33727 ZIRCONIUM
L6            49 L5 AND ZIRCONIUM
=> s l6 and clay
          46991 CLAY
L7            11 L6 AND CLAY
=> s l7 and cellulose
         106262 CELLULOSE
L8             4 L7 AND CELLULOSE
=> s l8 and Claus
           1509 CLAUS
L9             0 L8 AND CLAUS
=> s l1 and claus
           1509 CLAUS
L10          856 L1 AND CLAUS
=> d his
     (FILE 'USPAT' ENTERED AT 09:06:55 ON 28 JUN 96)
L1       157309 S CATALYST
L2          635 S L1 AND ACTIVE ALUMINA
L3          325 S L2 AND SODIUM
L4            0 S L3 AND 2700 PPM
L5          240 S L3 AND SILICA
```

```
L6            49 S L5 AND ZIRCONIUM
L7            11 S L6 AND CLAY
L8             4 S L7 AND CELLULOSE
L9             0 S L8 AND CLAUS
L10          856 S L1 AND CLAUS
=> s l10 and active alumina
         323449 ACTIVE
          80648 ALUMINA
            814 ACTIVE ALUMINA
                  (ACTIVE(W)ALUMINA)
L11           32 L10 AND ACTIVE ALUMINA
=> s l11 and sodium
         272719 SODIUM

L12           11 L11 AND SODIUM
=> s l12 and (silica or zirconium)
         140587 SILICA
          33727 ZIRCONIUM
L13            8 L12 AND (SILICA OR ZIRCONIUM)
=> s l13 and clay
          46991 CLAY
L14            0 L13 AND CLAY
=> s l13 and (silicate or ceramic)
          48042 SILICATE
          94357 CERAMIC
L15            0 L13 AND (SILICATE OR CERAMIC)
=> s l13 and (calcium or barium)
         144811 CALCIUM
          48780 BARIUM
L16            6 L13 AND (CALCIUM OR BARIUM)
=> s l13 and calcium sulfate
         144811 CALCIUM
         132506 SULFATE
          11398 CALCIUM SULFATE
                  (CALCIUM(W)SULFATE)
L17            0 L13 AND CALCIUM SULFATE
=> s l13 and barium sulfate
          48780 BARIUM
         132506 SULFATE
          10617 BARIUM SULFATE
                  (BARIUM(W)SULFATE)
L18            0 L13 AND BARIUM SULFATE
=> s l16 and cellulose
         106262 CELLULOSE
L19            1 L16 AND CELLULOSE
=> d
```

1. 5,244,648, Sep. 14, 1993, Process for the preparation of alumina agglomerates; Thierry Dupin, et al., 423/626; 23/313R; 423/628; 502/355, 415 [IMAGE AVAILABLE]

=> d ab

US PAT NO: 5,244,648 [IMAGE AVAILABLE] L19: 1 of 1

ABSTRACT:
Provided is a process for preparing alumina agglomerates which comprises:
(i) treating agglomerates of **active** **alumina** with an aqueous medium comprising at least one acid making it possible to dissolve at least part of the alumina and at least one compound providing an anion capable of combining with aluminum ions in solution,
(ii) subjecting the agglomerates to a hydrothermal treatment at a temperature in the range of from about 80.degree. C. to about 250.degree. C., and then
(iii) thermally activating the agglomerates at a temperature in the range of about 500.degree. C. to about 1100.degree. C.
The resulting alumina agglomerates possess exceptional mechanical strength, heat resistance and hydrothermal resistance and are useful as catalysts or **catalyst** supports.

=> s l13 and ammonium sulfate

```
        144874 AMMONIUM
        132506 SULFATE
         14397 AMMONIUM SULFATE
                 (AMMONIUM(W)SULFATE)
L20           0 L13 AND AMMONIUM SULFATE
```

=>

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=> d his
     (FILE 'USPAT' ENTERED AT 09:06:55 ON 28 JUN 96)
L1        157309 S CATALYST
L2           635 S L1 AND ACTIVE ALUMINA
L3           325 S L2 AND SODIUM
L4             0 S L3 AND 2700 PPM
L5           240 S L3 AND SILICA
L6            49 S L5 AND ZIRCONIUM
L7            11 S L6 AND CLAY
L8             4 S L7 AND CELLULOSE
L9             0 S L8 AND CLAUS
L10          856 S L1 AND CLAUS
L11           32 S L10 AND ACTIVE ALUMINA
L12           11 S L11 AND SODIUM
L13            8 S L12 AND (SILICA OR ZIRCONIUM)
L14            0 S L13 AND CLAY
L15            0 S L13 AND (SILICATE OR CERAMIC)
L16            6 S L13 AND (CALCIUM OR BARIUM)
L17            0 S L13 AND CALCIUM SULFATE
L18            0 S L13 AND BARIUM SULFATE
L19            1 S L16 AND CELLULOSE
L20            0 S L13 AND AMMONIUM SULFATE
=> s 12 and (silica or titanium or zirconium or tin or nickel)

       1684405 12
        140587 SILICA
        101867 TITANIUM
         33727 ZIRCONIUM
         72348 TIN
        111340 NICKEL

L21       264869 12 AND (SILICA OR TITANIUM OR ZIRCONIUM OR TIN OR NICKEL)
=> s l12 and (silica or titanium or zirconium or tin or nickel or iron)
        140587 SILICA
        101867 TITANIUM
         33727 ZIRCONIUM
         72348 TIN
        111340 NICKEL
        164413 IRON

L22            8 L12 AND (SILICA OR TITANIUM OR ZIRCONIUM OR TIN OR NICKEL O
R I
                 RON)
=>
=> s l22 and (clay or silicate or ceramic or asbestos)
         46991 CLAY
         48042 SILICATE
```

```
          94357 CERAMIC
          20360 ASBESTOS
L23           0 L22 AND (CLAY OR SILICATE OR CERAMIC OR ASBESTOS)
=> s l22 and (clay or silicate)
          46991 CLAY
          48042 SILICATE
L24           0 L22 AND (CLAY OR SILICATE)
=> s l22 and (silicate or ceramic)
          48042 SILICATE
          94357 CERAMIC
L25           0 L22 AND (SILICATE OR CERAMIC)
=>
```

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
=> s catalyst
L1       157309 CATALYST
=> s l1 and active alumina
         323449 ACTIVE
          80648 ALUMINA

             814 ACTIVE ALUMINA
                   (ACTIVE(W)ALUMINA)
L2           635 L1 AND ACTIVE ALUMINA
=> s l2 and sodium
         272719 SODIUM
L3           325 L2 AND SODIUM
=> s l3 and silica
         140587 SILICA
L4           240 L3 AND SILICA
=> s l4 and zirconium
          33727 ZIRCONIUM
L5            49 L4 AND ZIRCONIUM
=> s l5 and clay
          46991 CLAY
L6            11 L5 AND CLAY
=> s l6 and cellulose
         106262 CELLULOSE
L7             4 L6 AND CELLULOSE
=> d 1-

1.  5,498,478, Mar. 12, 1996, Polyethylene glycol as a binder material
for fibers; Michael R. Hansen, et al., 428/372, 243, 281, 283, 357, 359,
375, 393 [IMAGE AVAILABLE]

2.  5,432,000, Jul. 11, 1995, Binder coated discontinuous fibers with
adhered particulate materials; Richard H. Young, Sr., et al., 428/372,
357, 361, 373, 375, 378, 393 [IMAGE AVAILABLE]

3.  RE 34,853, Feb. 7, 1995, Preparation of monolithic **catalyst**
supports having an integrated high surface area phase; Thomas P.
DeAngelis, et al., 502/439, 64, 263, 351, 355, 524, 527 [IMAGE AVAILABLE]

4.  4,637,995, Jan. 20, 1987, Preparation of monolithic **catalyst**
supports having an integrated high surface area phase; Thomas P.
DeAngelis, et al., 502/439, 64, 263, 351, 355, 524, 527 [IMAGE AVAILABLE]
=>
```